

LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1.-22. (Cancelled)

23. (Previously Presented) A method for impairing cancerous progenitor cells, which express CD123, but do not significantly express CD131, in a patient in need thereof, comprising introducing to the patient's bone marrow or peripheral blood a composition comprising an antibody conjugated to a cytotoxic agent, wherein said antibody binds selectively to CD123.

24.-57. (Cancelled)

58. (Previously Presented) The method of claim 23, wherein the cancerous progenitor cells do not significantly express CD131 as examined by flow cytometry.

59. (Cancelled)

60. (Previously Presented) The method of claim 23, wherein the antibody is a monoclonal antibody, F(ab')₂, Fab or Fv.

61. (Previously Presented) The method of claim 23, wherein the cytotoxic agent is a chemotherapeutic agent, a plant-derived toxin, a fungus-derived toxin, a bacteria-derived toxin or a radioisotope.

62. (Previously Presented) The method of claim 61, wherein the bacteria-derived toxin is a deglycosylated ricin A chain, a ribosome inactivating protein, alpha-sarcin, aspergillin, restrictocin, a ribonuclease, diphtheria toxin or *Pseudomonas* exotoxin.

63. (Previously Presented) The method of claim 23, wherein the cytotoxic agent is a hormone, an antimetabolite, an alkylating agent, a coagulant, a cytokine, a growth factor, a bacterial endotoxin, the lipid A moiety of a bacterial endotoxin or a cytotoxin.

64. (Previously Presented) The method of claim 61, wherein the chemotherapeutic agent is a steroid, cytosine, arabinoside, fluorouracil, methotrexate, aminopterin, an anthracycline, mitomycin C, a vinca alkaloid, demecolcine, etoposide, mithramycin, calicheamicin, CC-1065, chlorambucil or melphalan.

65. (Previously Presented) The method of claim 61, wherein the radioisotope is an alpha-emitting radioisotope or a beta-emitting radioisotope.

66. (Previously Presented) The method of claim 23, wherein the patient is human.

67.-71. (Cancelled)

72. (Previously Presented) A method for impairing cancerous progenitor cells, which express CD123, but do not express CD131 as examined by flow cytometry, in a patient in need thereof, comprising introducing to the patient's bone marrow or peripheral blood a composition comprising a conjugate, wherein the conjugate comprises a cytotoxic agent and an antibody that binds to CD123.

73.-75. (Cancelled)

76. (Previously Presented) The method of claim 72, wherein the antibody selectively binds to CD123.

77.-92. (Cancelled)